

**FILED**

**JAN 11 2010**

**SECRETARY, BOARD OF  
OIL, GAS & MINING**

**BEFORE THE BOARD OF OIL, GAS AND MINING  
DEPARTMENT OF NATURAL RESOURCES  
STATE OF UTAH**

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF WOLVERINE GAS AND OIL COMPANY OF UTAH, LLC FOR AN ORDER AUTHORIZING THE FLARING AND VENTING OF GAS IN EXCESS OF THE AMOUNTS ALLOWED UNDER UTAH ADMIN. CODE RULE R649-3-20(1.1) FROM THE WOLVERINE FEDERAL ARAPIEN VALLEY 24-1 AND PROVIDENCE FEDERAL 24-4 WELLS LOCATED IN THE W½ OF SECTION 24, TOWNSHIP 20 SOUTH, RANGE 1 EAST, SLM, SANPETE COUNTY, UTAH

**REQUEST FOR AGENCY ACTION**

Docket No. 2010- 010

Cause No. 269-01

COMES NOW, Wolverine Gas and Oil Company of Utah, LLC ("Wolverine"), acting by and through its attorneys, Beatty & Wozniak, P.C., and pursuant to Utah Code Ann. §40-6-5(3)(f) and Utah Admin. Code Rule R649-3-20(5), and hereby respectfully requests the Board of Oil, Gas and Mining (the "Board") to enter an order authorizing Wolverine or its successors, as operator(s) of the Wolverine Federal Arapien Valley 24-1 Well (the "24-1 Well") and the Providence Federal 24-4 Well (the "24-4 Well"), both located within the W½ of Section 24, Township 20 South, Range 1 East, SLM, Sanpete County, Utah, to indefinitely flare and vent gas in excess of 1,800 MCF per month for each well, being the amount currently allowed without further Board approval under Utah Admin. Code Rule R649-3-20(1.1), subject to the requirement that Wolverine or its successor operator(s) annually, on or before the anniversary date of entry of such order, prepare and submit a written report to the Utah Division of Oil, Gas and Mining (the "Division") confirming whether the conditions for such flaring and venting

have materially changed such that the authorization should be revisited by the Board and, if the Division so determines, requiring Wolverine or its successor operator(s) to reappear before the Board to submit updated evidence and testimony in conformance with Utah Admin. Code Rule R649-3-20(5) to reflect that the authorized flaring and venting is still justified or that modification of the Order to account for the changed conditions is instead required.

In support of this request, Wolverine respectfully states and represents:

1. Wolverine is a Michigan limited liability company with its principal place of business in Grand Rapids, Michigan. It is a wholly-owned subsidiary of Wolverine Gas and Oil Corporation. Wolverine is duly qualified to conduct business in the State of Utah, and is fully and appropriately bonded with all relevant Federal and State of Utah agencies.

2. The oil and gas underlying the W<sup>1</sup>/<sub>2</sub> of captioned Section 24 are Federally owned and subject to the terms of United States Oil and Gas Lease UTU-80907. Said lease has been fully and properly committed to the Wolverine Federal Exploratory Unit (the "Unit"). Wolverine is the duly designated operator of the Unit.

3. Pursuant to the terms of the governing Unit and Unit Operating Agreements and to an approved application for permit to drill ("APD"), Wolverine spud the 24-1 Well on November 9, 2007 at a surface location 2,331 feet FNL and 549 feet FWL in the SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> of Section 24, drilled the well with a slight vertical deviation to a plugged back depth of 12,755 feet, and completed the well as a producing oil well on April 27, 2009 with producing intervals in what Wolverine has designated as the "Navajo 2," with a top location at 2,330 feet FNL and

590 feet FWL, and all within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ . Production test results are outlined in Paragraph 7(b) below. The Well is currently in shut-in status awaiting resolution of this Request.

4. Additionally, pursuant to the terms of the governing Unit and Unit Operating Agreements and to an approved APD, Wolverine spud the 24-4 Well on January 16, 2009 at a surface location 975 feet FSL and 41 feet FWL in the SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 24, drilled the well to a plugged back depth of 12,770 feet, and completed the well as a producing oil well on September 23, 2009 with producing intervals in what Wolverine has designated as the "Navajo 1." Production test results are outlined in Paragraph 7(b) below. The Well is in shut-in status awaiting resolution of this Request.

5. Both wells are located on remote Federally owned surface lands, with the 24-1 Well at least two miles away, and the 24-4 Well at least one mile away, from any permanent residents.

6. Pursuant to Utah Admin. Code Rules R649-3-19(3) and R649-3-20(1.2) and (3), Wolverine filed for and received the approval of the Division for additional testing and to allow flaring and venting at unrestricted rates. However, the limitations of such administrative approval have been reached, resulting in the current shut-in status of both wells. Federal approvals of the flaring and venting during the additional testing period by the United States Bureau of Land Management ("BLM") were obtained in accordance with the provisions of NTL-4A. Copies of said administrative approvals are collectively attached hereto as Exhibit "1" and by this reference incorporated herein.

7. As required under the provisions of Utah Admin. Code Rule R649-3-20(5),

Wolverine addresses the criteria for submitting and granting this Request as follows:

- a) **Subsection 5.1 – Statement Justifying the Need to Vent or Flare More than the Allowable Amount.** The 24-1 Well encountered productive Navajo 1 and Navajo 2, while the 24-4 Well encountered only productive Navajo 1. The Navajo 2 is interpreted as a small hydrocarbon accumulation with limited potential. The Navajo 1, occurring at depths shallower than the Navajo 2, is a low permeability oil and gas reservoir that contains unusually high concentrations of inert gases. The gas composition of the Navajo 1 consists of approximately 80.7% carbon dioxide (CO<sub>2</sub>), 5.5% nitrogen, 14% natural gas and a trace of hydrogen sulfide (H<sub>2</sub>S). Significant gas treatment and processing would be required to remove the CO<sub>2</sub>, nitrogen and trace amounts of H<sub>2</sub>S before the gas could be marketable and placed into a pipeline. The infrastructure needed to treat, process and transport the remaining gas to market is not an economically viable option. Therefore, to produce these wells will require flaring and venting gas volumes in excess of the limit of 1,800 MCF per month (the approximate equivalent of 60 MCF per day) under Utah Admin. Code Rule R649-3-20(1.1).
- b) **Subsection 5.2 – Description of Production Test Results.** Production tests were run in accordance with the Division and BLM administrative approvals. Although the 24-1 Well tested both the Navajo 1 and Navajo 2, the Well is currently completed only in the Navajo 2 and was flow tested at a stabilized daily rate of 67 BOPD, 0 BWPD and 382 MCFPD, with a GOR of 5,702. The 24-4 Well was completed in and tested the Navajo 1 at a stabilized daily rate of 73 BOPD, 52 BWPD and 491 MCFPD, with a GOR of 6,726. As evidenced by the tests, the daily gas production rates exceed the approximate 60 MCFPD regulatory flaring and venting limitation.
- c) **Subsection 5.3 – Chemical Analyses of Produced Gas.** The chemical analyses from the Navajo 1 and Navajo 2 are collectively attached as Exhibit “2” hereto and by this reference incorporated herein. The two gas compositions differ in that the Navajo 1 has 86% inert gases plus 0.0032% (32 ppm) H<sub>2</sub>S, while the Navajo 2 has approximately 19.9% inert gases, and 0.10% (1000 ppm) H<sub>2</sub>S.
- d) **Subsection 5.4 – Estimated Oil and Gas Reserves.** Given the limited test data and complex nature of the Navajo 1 and Navajo 2, it is premature to provide an accurate estimate of reserves. Based on the limited flow period, the decline curve analysis of the Navajo 2 suggests a three-year EUR of 32,500 BO and 0.269 BCF

total gas (~ 0.22 BCF excluding inert gases). The Navajo 1 was produced for a limited test in the 24-1 Well and for a 61-day extended test in 24-4 Well. During that initial test period, production declined from approximately 200 BOPD to 73 BOPD over the 61 day test interval. Estimating reserves with this short test period is difficult; however, assuming the decline stabilizes at 7%/year, the 10-year EUR is < 500,000 BO. A preliminary reservoir model, which incorporated PVT data and well-test derived permeability, also was developed to look at field development options for the Navajo 1 reservoir. Under the best case scenario, assuming a fully stimulated completion (e.g., no skin damage), the 10-year EUR was estimated at 970,000 BO and 4.5 BCF total gas (~0.6 BCF gas, excluding inert gases).

- e) **Subsection 5.5 – Descriptions of Reinjection or Other Conservation-Oriented Alternatives.** Wolverine has explored gas treatment options and gas injection. All alternatives are uneconomic for reasons addressed in (g) below.
- f) **Subsection 5.6 – Description of the Amount of Gas Used in Lease Operations.** Because of the high inert gas concentrations and low BTU content of the Navajo 1 produced gas, purchased and trucked propane gas would be used to run the fired vessels and operate the pilots during start-up or other conditions that may limit flow of associated gas from the facility. Under normal conditions, produced gas would be used as pilot gas in order to limit propane consumption. When the Navajo 2 gas is available, it would be used as the fuel source. Wolverine anticipates gas usage to be no more than 10 MCFPD.
- g) **Subsection 5.7 – Economic Evaluation Supporting Operator’s Determination that Conservation of Gas is Not Economically Viable.** Wolverine evaluated the following three scenarios for handling the produced gas stream.
  - (i) **Option 1 – Flaring and venting produced gas.** This option would require conventional oilfield handling methods, which would include in-line heater, high pressure separator, heater treater, crude oil tankage, flare knock-out and flare unit. This scenario provides the lowest cost for facilities and operating costs and is the option for which approval by the Board is sought by this Request. Options 2 and 3, below, would require additional equipment.

Under Option 1, the only revenue stream would be from the sale of oil produced from both the Navajo 2 and Navajo 1. Capital costs for this option, including drilling, completion and equipping the two wells, would

be approximately \$32.3 million. Assuming the high-case EUR (the “best case scenario”), discounted cashflow at 10% (“NPV10”) is \$767,000 and the IRR is approximately 10.4%. It should be noted that this option requires additional well work to further stimulate these wells and increase production over existing production.

- (ii) **Option 2 – Reinjection of gas.** This option would require the Option 1 equipment, plus a compressor and dehydration unit. Total capital cost would be \$32.3 million plus an additional \$1.0 million for compression and dehydration unit, for \$33.3 million. This option also would require either drilling a new well, approximate cost of \$7 million, or conversion of an existing producing well to injection, which would have a significant impairment on oil revenue. These increased costs would make the project uneconomical.
- (iii) **Option 3 - Gas treatment, transportation and sale.** This option would require construction of a gas treatment plant to remove high concentrations of CO<sub>2</sub>, nitrogen and H<sub>2</sub>S, construction of ~ 4.6 mile pipeline, and metering station prior to connecting to the pipeline. In addition to the conventional oil handling equipment listed under Option 1, this option would envision a combination of membrane technology and refrigeration, which would produce a salable liquid stream and fuel gas stream, which would have to be further polished to remove the residual CO<sub>2</sub> and nitrogen. It is the opinion of BCCK Engineering, a facilities design firm, that final removal of CO<sub>2</sub> and nitrogen would be cost prohibitive due to the small flow rates. Capital costs for the liquids recovery and removal of bulk CO<sub>2</sub> plant has been estimated at ~ \$8.2 million (3 MMCFPD), which does not include final polishing necessary to make the gas salable. The incremental cost to the facility is not justified under this scenario, and would not be covered by gas revenue.

- h) **Subsection 5.8 – Any Other Information Pertinent to a Determination of Whether Marketing or Otherwise Conserving the Produced Gas is Economically Feasible.** None.

To recover the discovered oil reserves, the flaring and venting of the produced associated gas is the only economically viable option for Wolverine at this time and for the foreseeable future.

8. Wolverine seeks relief for indefinite flaring and venting in amounts in excess of those allowed under current regulation. However, cognizant of the Board's statutory responsibilities, Wolverine agrees to annually, on or before the anniversary date of the entry of the Board's order (presuming the relief requested herein is granted), prepare and submit a written report to the Division confirming whether the conditions for such flaring and venting have materially changed such that the authorization should be revisited by the Board and, if the Division so determines, Wolverine agrees to reappear before the Board to submit updated evidence and testimony in conformance with Utah Admin. Code Rule R649-3-20(5) to reflect that the authorized flaring and venting is still justified or that modification of the Order to account for the changed conditions is instead required.

9. Wolverine will take all steps required under State and Federal regulation for the protection of the health, safety and welfare of the general public, including but not limited to continued compliance with Federal Onshore Order No. 6 and Utah Admin. Code Rule R649-3-12.

10. Presuming the relief requested herein is granted, Wolverine will file a conforming NTL-4A request with the BLM as necessary.

11. Wolverine believes and therefore alleges that granting its Request will be in furtherance of the public policies of this State to promote greater recovery of oil without waste and with protection of the correlative rights of all affected owners, and is just and reasonable under the circumstances.

12. Wolverine will, in accordance with Board rules, timely submit exhibits and present testimony in support of these allegations.

13. Wolverine will separately file a certificate of mailing listing all parties known to it, based on a search of the respective Federal and County realty records and the records of the Division, whose "legally protected interests" will be affected by this Request. There are no respondents or adverse parties known at this time to Wolverine.

**WHEREFORE**, Wolverine respectfully requests:

1. That this matter be set for hearing on February 24, 2010;
2. That notice of such hearing be given as provided by law; and
3. That, upon sufficient evidence produced and testimony given at the hearing, the

Board issue an order:

a) Authorizing Wolverine or its successor(s) as operator of the 24-1 and 24-4 Wells to indefinitely flare and vent gas in excess of amount currently allowed under Utah Admin. Code Rule R649-3-20(1.1); provided, however, that Wolverine or its successor(s) shall annually prepare and submit a written report on or before the anniversary date of the entry of such order (presuming the relief requested herein is granted) to the Division confirming whether the conditions for such flaring and venting have materially changed such that the authorization should be revisited by the Board and, if the Division so determines, that Wolverine or its successor(s) shall reappear before the Board to submit updated evidence and testimony in conformance with Utah Admin. Code Rule R649-3-20(5) to reflect that the authorized flaring and venting is still justified or that modification of the Order to account for the changed conditions is instead required;

b) Making such findings and orders in connection with this Request as it deems necessary; and

c) Providing for such other and further relief as may be just and equitable under the circumstances.



Respectfully submitted this 11<sup>th</sup> day of January, 2010.

**BEATTY & WOZNIAK, P.C.**

By: 

Frederick M. MacDonald

6925 Union Park Center, Suite 525

Cottonwood Heights, UT 84047

Telephone: (801) 566-8446

Facsimile: (801) 566-8447

E-Mail: FMacDonald@bwenergylaw.com

Attorneys for Petitioner Wolverine Gas and Oil  
Company of Utah, LLC

Petitioner's Address:

Wolverine Gas and Oil Company of Utah, LLC

Attention: Richard Moritz, Vice President – Land

One Riverfront Plaza

55 Campau, N.W.

Grand Rapids, MI 49503-2616

Telephone: (616) 458-1150

Facsimile: (616) 458-0869

E-Mail: rmoritz@wolvgas.com



United States Department of the  
Interior



BUREAU OF LAND MANAGEMENT  
Richfield Field Office  
150 East 900 North  
Richfield, Utah 84701  
<http://www.blm.gov>

IN REPLY REFER TO:  
3160  
UT050

October 14, 2008

Ellis Peterson  
Sr. Production Engineer  
Wolverine Gas and Oil company of Utah, LLC  
55 Campau NW  
Grand Rapids, Michigan 49503

Re: Well No. Wolverine Federal Arapien Valley 24-1  
SW $\frac{1}{4}$ NW $\frac{1}{4}$ , Sec. 24, T. 20 S., R. 1 E., SLB & M.  
Sevier County, Utah  
Lease No. U-80907, Unit No. U-80800X

Gentlemen:

This correspondence is in regard to the Sundry Notice submitted September 12, 2008, requesting continued testing with gas venting for the referenced well. After a review by this office, the request is approved.

If you have any other questions concerning this matter, please contact Pam Hart of this office at (435) 896-1590.

Sincerely,

Stan Andersen  
Supervisor Natural Resource  
Specialist

cc: UDOGM

EXHIBIT 1

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **Wolverine Gas and Oil Company of Utah, LLC**

3a. Address  
**55 Campau NW, Grand Rapids, MI 49503**

3b. Phone No. (include area code)  
**616-458-1150**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**2331' FNL, 549' FWL, Sec. 24, T20S, R1E, SLB&M**

5. Lease Serial No.  
**UTU-80907**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA/Agreement, Name and/or No.  
**Wolverine Unit**

8. Well Name and No.  
**Wolverine Federal Arapien Valley 24-1**

9. API Well No.  
**43-039-30030**

10. Field and Pool, or Exploratory Area  
**Wildcat**

11. County or Parish, State  
**Sanpete County, Utah**

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Continued testing</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>with gas venting</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

**This is the discovery well for a new field with multiple potential oil accumulations. Extensive testing has been completed in several intervals of interest in Navajo1 and Navajo2 reservoirs during which a total of approximately 22 MMCF of gas have been vented/flared. There are two potentially productive but untested intervals remaining that require testing to confirm productivity and reservoir content, but an extension of the 30-day limit allowed by NTL-4a for flaring/venting of gas is necessary in order to complete this testing. A continuation of the initial flaring/venting period for testing this well for up to 20 additional days is therefore requested so testing operations of intervals at depths of 8942'-8948' and 8854'- 8872' can be completed.**

**A wellbore schematic showing the current mechanical configuration and test results to date is included herewith.**

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

**Ellis Peterson**

Title **Sr. Production Engineer**

Signature

*Ellis Peterson*

Date

**09/11/2008**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*Shirley L. Anderson*

Title

**SNRS**

Date

**9-29-08**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

**BEAUFIELD FO**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

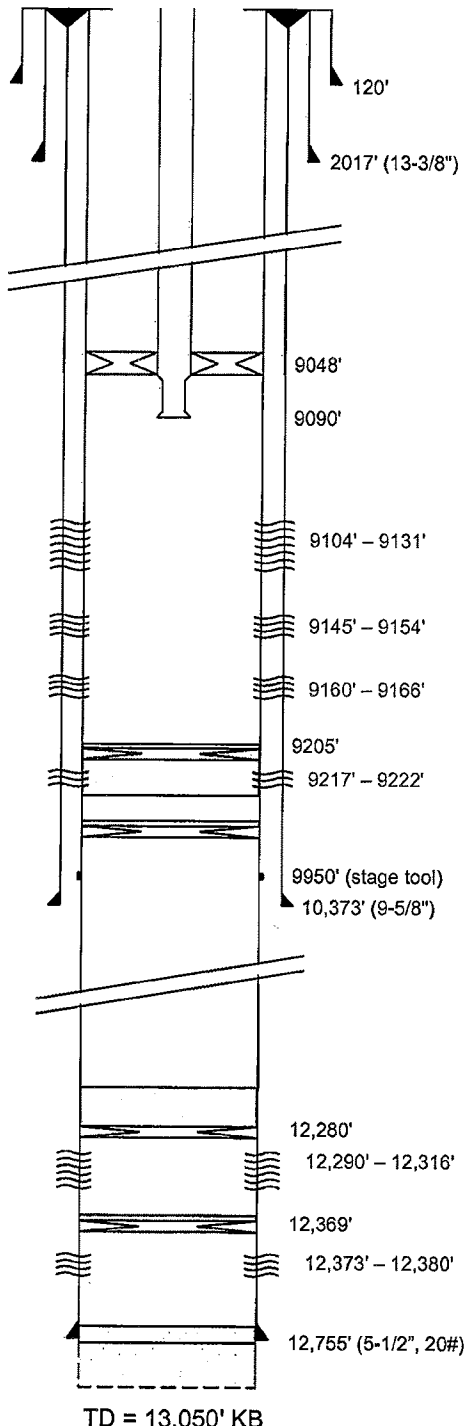
**ORPL APPROVAL FROM AL MCKEE 9-26-08**



**Arapien Valley 24-1**  
**Providence Field**  
**API # 43-039-30030**  
**Sanpete County, Utah**

**(Not to Scale)**

Ground Elevation: 5,554'  
 KB Elevation: 5,580'



**Vertical Well**

Surface: 2331' FNL 549' FWL, SW NW, 24-20S-1E  
 Total Depth: 2370' FNL 620' FWL, SW NW, 24-20S-1E

**9104' - 9166':** Recovery: 2215 BO, 2910 BW, 9.7 MMCF  
 Flashed Gas - 1.47 sp. gr., 30 ppm H<sub>2</sub>S, 79% CO<sub>2</sub>, 6% N<sub>2</sub>,  
 349 BTU/scf  
 Flashed Oil - 48 °API, 2380 scf/stb  
 Final Rate: 128 BOPD, 217 BWPD, 740 MCFD w/ 330 psi FTP

**9104' - 9131':** Recovery: 964 BO, 941 BW, 6.3 MMCF  
 Final Rate: 163 BOPD, 160 BWPD, 1183 MCFD w/ 380 psi FTP

**9145' - 9166':** Recovery: 550 BO, 129 BW, 1.5 MMCF  
 Final Rate: 150 BOPD, 72 BWPD, 713 MCFD w/ 420 psi FTP

**9217' - 9222':** Swabbed and flowed 20 hours (recovered 22 BO,  
 405 BW, gas not measured)

**12,290' - 12,316':** Recovery: 1338 BO, 122 BW, 4 MMCF  
 Flashed Gas - 1.02 sp. gr., 0.08% H<sub>2</sub>S, 7% CO<sub>2</sub>, 9% N<sub>2</sub>,  
 1437 BTU/scf  
 Flashed Oil - 48 °API, 2380 scf/stb  
 Final Rate: 160 BOPD, 20 BWPD, 473 MCFD w/ 200 psi FTP

**12,373' - 12,380':** Flowed oil and gas (no water) for 21 hours  
 before equipment failure.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**CONFIDENTIAL**

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. <b>UTU-80907</b>
2. Name of Operator <b>Wolverine Gas and Oil Company of Utah, LLC</b>		6. If Indian, Allottee or Tribe Name <b>NA</b>
3a. Address <b>55 Campau NW, Grand Rapids, MI 49503</b>	3b. Phone No. (include area code) <b>616-458-1150</b>	7. If Unit or CA/Agreement, Name and/or No. <b>Wolverine Unit</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>2331' FNL, 549' FWL, Sec. 24, T20S, R1E, SLB&amp;M</b>		8. Well Name and No. <b>Wolverine Federal Arapien Valley 24-1</b>
		9. API Well No. <b>43-039-30030</b>
		10. Field and Pool, or Exploratory Area <b>Wildcat</b>
		11. County or Parish, State <b>Sanpete County, Utah</b>

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Continued testing with gas venting</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

This is the discovery well for a new field with multiple potential oil accumulations. Extensive testing has been completed in several intervals of interest in Navajo1 and Navajo2 reservoirs during which a total of approximately 22 MMCF of gas have been vented/flared. There are two potentially productive but untested intervals remaining that require testing to confirm productivity and reservoir content, but an extension of the 30-day limit allowed by NTL-4a for flaring/venting of gas is necessary in order to complete this testing. A continuation of the initial flaring/venting period for testing this well for up to 20 additional days is therefore requested so testing operations of intervals at depths of 8942'-8948' and 8854'-8872' can be completed.

A wellbore schematic showing the current mechanical configuration and test results to date is included herewith.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

*Federal Approval Of This  
Action Is Necessary*

Date: **9/17/08**

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/Typed)

**Ellis Peterson**

Title **Sr. Production Engineer**

Signature

*Ellis Peterson*

Date

**09/11/2008**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**RECEIVED**

**SEP 15 2008**

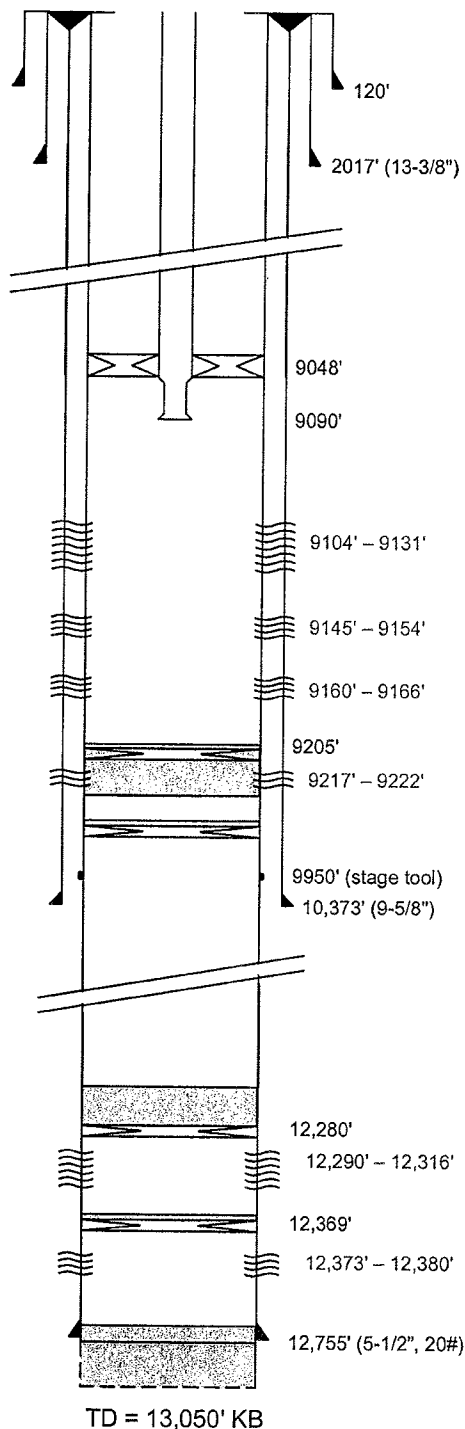
DIV. OF OIL, GAS & MINING



**Arapien Valley 24-1  
Providence Field  
API # 43-039-30030  
Sanpete County, Utah**

**(Not to Scale)**

Ground Elevation: 5,554'  
KB Elevation: 5,580'



**Vertical Well**

Surface: 2331' FNL 549' FWL, SW NW, 24-20S-1E  
Total Depth: 2370' FNL 620' FWL, SW NW, 24-20S-1E

**9104' - 9166'**: Recovery: 2215 BO, 2910 BW, 9.7 MMCF  
Flashed Gas - 1.47 sp. gr., 30 ppm H<sub>2</sub>S, 79% CO<sub>2</sub>, 6% N<sub>2</sub>,  
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Flashed Oil - 48 °API, 2380 scf/stb  
Final Rate: 128 BOPD, 217 BWPD, 740 MCFD w/ 330 psi FTP

**9104' - 9131'**: Recovery: 964 BO, 941 BW, 6.3 MMCF  
Final Rate: 163 BOPD, 160 BWPD, 1183 MCFD w/ 380 psi FTP

**9145' - 9166'**: Recovery: 550 BO, 129 BW, 1.5 MMCF  
Final Rate: 150 BOPD, 72 BWPD, 713 MCFD w/ 420 psi FTP

**9217' - 9222'**: Swabbed and flowed 20 hours (recovered 22 BO,  
405 BW, gas not measured)

**12,290' - 12,316'**: Recovery: 1338 BO, 122 BW, 4 MMCF  
Flashed Gas - 1.02 sp. gr., 0.08% H<sub>2</sub>S, 7% CO<sub>2</sub>, 9% N<sub>2</sub>,  
1437 BTU/scf  
Flashed Oil - 48 °API, 2380 scf/stb  
Final Rate: 160 BOPD, 20 BWPD, 473 MCFD w/ 200 psi FTP

**12,373' - 12,380'**: Flowed oil and gas (no water) for 21 hours  
before equipment failure.

CONFIDENTIAL

FORM 9

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTU-80907

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
NA

7. UNIT or CA AGREEMENT NAME:  
Wolverine Federal Unit

8. WELL NAME and NUMBER:  
Wolv. Fed. Arapien Valley 24-1

9. API NUMBER:  
4303930030

10. FIELD AND POOL, OR WILDCAT:  
Wildcat

1. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
Wolverine Gas and Oil Company of Utah, LLC

3. ADDRESS OF OPERATOR:  
55 Campau NW CITY Grand Rapids STATE MI ZIP 49503-2616 PHONE NUMBER: (616) 458-1150

4. LOCATION OF WELL  
FOOTAGES AT SURFACE: 2331' FNL, 549' FWL

COUNTY: Sanpete

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 24 20S 1E S

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input checked="" type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

**CONTINUED CONFIDENTIAL STATUS REQUESTED**

Approval is hereby requested to flare gas for a period of 60 days while production testing the Navajo2 Formation at the Wolverine Federal Arapien Valley 24-1 well. This is requested to establish stabilized producing rates and help determine commercially. Additional details are provided in the cover letter to this notice and in the attached Completion Summary and Results.

Attachments: Completion Summary and Results, Well Bore Schematic

NAME (PLEASE PRINT) Ellis M. Peterson

TITLE Senior Production Engineer

SIGNATURE *Ellis M. Peterson*

DATE 10/21/2008

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

Federal Approval Of This  
Action Is Necessary

RECEIVED

OCT 22 2008

CONFIDENTIAL

DATE: 11/3/08

BY: *[Signature]*

(See Instructions on Reverse Side) DIV. OF OIL, GAS & MINING

(5/2000)

\* 2019-3-19 - necessary deliverability test  
A flare stack should be employed during extended testing

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. <b>UTU-80907</b>
2. Name of Operator <b>Wolverine Gas and Oil Company of Utah, LLC</b>		6. If Indian, Allottee or Tribe Name <b>NA</b>
3a. Address <b>55 Campau NW, Grand Rapids, MI 49503</b>	3b. Phone No. (include area code) <b>616-458-1150</b>	7. If Unit or CA/Agreement, Name and/or No. <b>Wolverine Unit</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>2331' FNL, 549' FWL, Sec. 24, T20S, R1E, SLB&amp;M</b>		8. Well Name and No. <b>Wolverine Federal Arapien Valley 24-1</b>
		9. API Well No. <b>43-039-30030</b>
		10. Field and Pool, or Exploratory Area <b>Wildcat</b>
		11. County or Parish, State <b>Sanpete County, Utah</b>

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Extended production</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>test with flaring gas</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Approval is hereby requested to flare gas for a period of 60 days while production testing the Navajo2 Formation at the Wolverine Federal Arapien Valley 24-1 well. This is requested to establish stabilized producing rates and help determine commercially. Additional details are provided in the cover letter to this notice and in the attached Completion Summary and Results.

**Attachments: Completion Summary and Results, Well Bore Schematic, UDOGM Approval for Extended Flaring**

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) <b>Ellis Peterson</b>		Title <b>Sr. Production Engineer</b>
Signature <i>Ellis Peterson</i>		Date <b>11/10/2008</b>

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by <i>Sharon L. Dahl</i>	Title <b>SNRS</b>	Date <b>11-20-08</b>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office <b>RICHFIELD F.O.</b>	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**Conditions of Approval Attached**

*Operator*

2008 NOV 12 AM 10:53  
BLM - UT - 950



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OM B No. 1004-0137  
Expires: March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. <b>UTU-80907</b>
2. Name of Operator <b>Wolverine Gas and Oil Company of Utah, LLC</b>		6. If Indian, Allottee or Tribe Name <b>NA</b>
3a. Address <b>55 Campau NW, Grand Rapids, MI 49503</b>	3b. Phone No. (include area code) <b>616-458-1150</b>	7. If Unit or CA/Agreement, Name and/or No. <b>Wolverine Unit</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>975' FSL, 41' FWL, Sec. 24, T20S, R1E, SLB&amp;M</b>		8. Well Name and No. <b>Providence Federal 24-4</b>
		9. API Well No. <b>43-039-30040</b>
		10. Field and Pool, or Exploratory Area <b>Wildcat</b>
		11. County or Parish, State <b>Sanpete County, Utah</b>

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Continued testing</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>with gas venting</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	


13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Providence Federal 24-4 is the first confirmation test to a new field discovery and it had apparent multiple potential hydrocarbon accumulations. Extensive testing has been completed on several intervals of interest in Moenkopi and Navajo1 formations during which no more than 10 MMCF of gas was vented/flared. After venting or flaring on 27 days while testing various perforation intervals, there is still need to produce the Navajo1 completion interval in order to collect down-hole fluid samples for laboratory testing. It then needs to continue producing for sufficient time as needed to acquire production data required for determining if the well can produce paying quantities. Because the 30-day limit allowed by NTL-4a for flaring/venting of gas will not allow adequate time to complete necessary testing of the well, a continuation of the initial flaring/venting period for up to 30 additional days is requested. Total production will be limited so that the total gas vented/flared inclusive of the gas produced to date does not exceed 50 MMCF. This well is located in an isolated area without infrastructure for shipping or processing the gas, and the gas being flared has low BTU and no market value in an unprocessed state.


A wellbore schematic showing the current mechanical configuration and a summary of completion work to date is included herewith.

**RECEIVED**

**JUL 24 2009**

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) <b>Ellis Peterson</b>		Title <b>Sr. Production Engineer</b>	<b>Richfield BLM Field Office</b>
Signature 		Date <b>07/22/2009</b>	

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by 	Title <b>SNRS</b>	Date <b>7-27-09</b>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office <b>Richfield Field Office</b>	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**COA ATTACHED**

Condition of Approval:

"A 30-day extension is granted for Wolverine Gas & Oil to vent/flare gas on the Providence 24-4 well through August 24, 2009. Should Wolverine need more time to vent or flare this well, an additional extension may be requested from the BLM Richfield Field Office."

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator **Wolverine Gas and Oil Company of Utah, LLC**

3a. Address  
**55 Campau NW, Grand Rapids, MI 49503**

3b. Phone No. (include area code)  
**616-458-1150**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**975' FSL, 41' FWL, Sec. 24, T20S, R1E, SLB&M**

5. Lease Serial No.  
**UTU-80907**

6. If Indian, Allottee or Tribe Name  
**NA**

7. If Unit or CA/Agreement, Name and/or No.  
**Wolverine Unit**

8. Well Name and No.  
**Providence Federal 24-4**

9. API Well No.  
**43-039-30040**

10. Field and Pool, or Exploratory Area  
**Wildcat**

11. County or Parish, State  
**Sanpete County, Utah**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>Continued testing with gas venting</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Providence Federal 24-4 is the first confirmation test to a new field discovery and it had apparent multiple potential hydrocarbon accumulations. Extensive testing has been completed on several intervals of interest in Moenkopi and Navajo1 formations during which no more than 10 MMCF of gas was vented/flared. After venting or flaring on 27 days while testing various perforation intervals, there is still need to produce the Navajo1 completion interval in order to collect down-hole fluid samples for laboratory testing. It then needs to continue producing for sufficient time as needed to acquire production data required for determining if the well can produce paying quantities. Because the 30-day limit allowed by NTL-4a for flaring/venting of gas will not allow adequate time to complete necessary testing of the well, a continuation of the initial flaring/venting period for up to 30 additional days is requested. Total production will be limited so that the total gas vented/flared inclusive of the gas produced to date does not exceed 50 MMCF. This well is located in an isolated area without infrastructure for shipping or processing the gas, and the gas being flared has low BTU and no market value in an unprocessed state.

A wellbore schematic showing the current mechanical configuration and a summary of completion work to date is included herewith.

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

**Ellis Peterson**

Title **Sr. Production Engineer**

Signature

*Ellis Peterson*

Date

**07/22/2009**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

*Don Whit*

Title

**Pet. Eng.**

Date

**7/30/09**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

**Dogun**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

*\* Required Testing*

**RECEIVED**

**JUL 27 2009**

**DIV. OF OIL, GAS & MINING**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

## SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU-80907
2. Name of Operator Wolverine Gas and Oil Company of Utah, LLC		6. If Indian, Allottee or Tribe Name NA
3a. Address 55 Campau NW, Grand Rapids, MI 49503	3b. Phone No. (include area code) 616-458-1150	7. If Unit or CA/Agreement, Name and/or No. Wolverine Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 975' FSL, 41' FWL, Sec. 24, T20S, R1E, SLB&M		8. Well Name and No. Providence Federal 24-4
		9. API Well No. 43-039-30040
		10. Field and Pool, or Exploratory Area Wildcat
		11. County or Parish, State Sanpete County, Utah

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Continued testing
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	with gas venting
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Providence Federal 24-4 is the first confirmation test to a new field discovery having multiple hydrocarbon accumulations. Extensive testing has been completed at this well on several intervals of interest in the Moenkopi and Navajo I formations. Because the 30-day limit allowed by NTL-4a for flaring/venting of gas did not allow adequate time to complete the necessary testing of this well, an extension to allow flaring was requested and granted through August 24, 2009. During the 30-day extension period, a pressure build-up test was conducted and followed by controlled flow conditioning and subsurface sampling, so the well was produced continually for only 17 days. Producing rates during flow testing have changed from initial daily volumes of 1262 MCF, 205 BO, and 11 BW with FTP of 405 psi to 747 MCF, 105 BO, and 46 BWPD with FTP of 250 psi on August 21, 2009. Total gas production from the well through August 21, 2009 was 25.5 MMCF. Because potential commerciality needs to be established for this field based in part on extrapolation of stable performance of this well, continued flow testing with flaring through September 23, 2009 is requested to allow production trends to be better defined. Total production will be limited if necessary so that the total gas vented/flared inclusive of the gas produced to date does not exceed 50 MMCF, but it does not appear that this limit will be exceeded prior to September 23, 2009.

RECEIVED

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Ellis Peterson

Title Sr. Production Engineer

Signature

Date

08/24/2009

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

09PH00838

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

FORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

## SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. UTU-80907
2. Name of Operator Wolverine Gas and Oil Company of Utah, LLC		6. If Indian, Allottee or Tribe Name NA
3a. Address 55 Campau NW, Grand Rapids, MI 49503	3b. Phone No. (include area code) 616-458-1150	7. If Unit or CA/Agreement, Name and/or No. Wolverine Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 975' FSL, 41' FWL, Sec. 24, T20S, R1E, SLB&M		8. Well Name and No. Providence Federal 24-4
		9. API Well No. 43-039-30040
		10. Field and Pool, or Exploratory Area Wildcat
		11. County or Parish, State Sanpete County, Utah

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Continued testing</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>with gas venting</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Providence Federal 24-4 is the first confirmation test to a new field discovery having multiple hydrocarbon accumulations. Extensive testing has been completed at this well on several intervals of interest in the Moenkopi and Navajo1 formations. Because the 30-day limit allowed by NTL-4a for flaring/venting of gas did not allow adequate time to complete the necessary testing of this well, an extension to allow flaring was requested and granted through August 24, 2009. During the 30-day extension period, a pressure build-up test was conducted and followed by controlled flow conditioning and subsurface sampling, so the well was produced continually for only 17 days. Producing rates during flow testing have changed from initial daily volumes of 1262 MCF, 205 BO, and 11 BW with FTP of 405 psi to 747 MCF, 105 BO, and 46 BWPD with FTP of 250 psi on August 21, 2009. Total gas production from the well through August 21, 2009 was 25.5 MMCF. Because potential commerciality needs to be established for this field based in part on extrapolation of stable performance of this well, continued flow testing with flaring through September 23, 2009 is requested to allow production trends to be better defined. Total production will be limited if necessary so that the total gas vented/flared inclusive of the gas produced to date does not exceed 50 MMCF, but it does not appear that this limit will be exceeded prior to September 23, 2009.

RECEIVED  
AUG 27 2009

DIV. OF OIL, GAS &amp; MINING

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Ellis Peterson

Title Sr. Production Engineer

Signature

Date

08/24/2009

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Federal Approval Of This  
Action Is Necessary

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

R449-3-19-3

July 11, 2008

**FESCO, Ltd.**  
**1100 Fesco Ave. - Alice, Texas 78332**

**For:** Wolverine Gas and Oil Corporation  
One Riverfront Plaza  
55 Campau NW  
Grand Rapids, Michigan 49503-2616

**Sample:** Arapien Valley 24-1  
Gas Sales Line  
Spot Gas Sample @ 160 PSIG & 72 °F

Date Sampled: 5/11/2008

Job Number: 83388.001

**CHROMATOGRAPH EXTENDED ANALYSIS - SUMMATION REPORT**

COMPONENT	MOL%	GPM
Hydrogen Sulfide*	0.100	
Nitrogen	11.753	
Carbon Dioxide	8.128	
Methane	63.235	
Ethane	8.433	2.301
Propane	4.093	1.150
Isobutane	1.303	0.435
n-Butane	1.364	0.439
2-2 Dimethylpropane	0.020	0.008
Isopentane	0.594	0.222
n-Pentane	0.368	0.136
Hexanes	0.341	0.143
Heptanes Plus	<u>0.268</u>	<u>0.114</u>
Totals	100.000	4.948

**Computed Real Characteristics Of Heptanes Plus:**

Specific Gravity ----- 3.427 (Air=1)  
Molecular Weight ----- 98.93  
Gross Heating Value ----- 5286 BTU/CF

**Computed Real Characteristics Of Total Sample:**

Specific Gravity ----- 0.838 (Air=1)  
Compressibility (Z) ----- 0.9965  
Molecular Weight ----- 24.20  
Gross Heating Value  
Dry Basis ----- 1075 BTU/CF  
Saturated Basis ----- 1057 BTU/CF

\*Hydrogen Sulfide tested on location by: Stained Tube Method (GPA 2377)  
Results: 62.89 Gr/100 CF, 1000.0 PPMV or 0.100 Mol %

Base Conditions: 15.025 PSI & 60 Deg F

Certified: FESCO, Ltd. - Alice, Texas

Analyst: CW  
Processor: RG  
Cylinder ID: G-1193

David Dannhaus 361-661-7015

# Applied Technology Services

1210 D Street, Rock Springs, WY 82901 (307) 352-7292

Meter Name: Providence Federal 24-4  
Field Name: COVENANT FIELD [sic, Providence Field]  
Analyst: MCMILLAN

Meter Location #: W244  
Cylinder Pressure: 0  
Line Pressure: 15  
Report Date: 06/24/2009 18:03  
Sample Dates(s): 06/24/2009 to 06/24/2009  
Flowing Temp: 75

## Gas Analysis by Chromatograph @14.73

NAME	MOLE%	BTU	SG	GPM
Nitrogen	5.4866	0.0000	0.0531	0.0000
Methane	6.0871	61.6219	0.0337	0.0000
CO2	80.7442	0.0000	1.2269	0.0000
Ethane	1.8978	33.6631	0.0197	0.5074
H2S	0.0000	0.0000	0.0000	0.0000
Propane	1.8620	46.9582	0.0283	0.5128
i-Butane	0.4437	14.4621	0.0089	0.1452
n-Butane	1.1453	37.4496	0.0230	0.3610
i-Pentane	0.4985	19.9906	0.0124	0.1823
n-Pentane	0.5841	23.4690	0.0146	0.2117
Hexanes	0.6275	29.9123	0.0187	0.2580
Heptanes	0.3990	22.0062	0.0138	0.1840
Octanes	0.1821	11.4058	0.0072	0.0933
Nonanes	0.0421	2.9523	0.0019	0.0237
Ideal Total	100.0000	303.8909	1.4621	2.4793

## Gross BTU/Real Cu Ft. @ 60 deg F

Pressure Base =	14.73	14.65	15.025
Dry =	305.7456	304.0750	311.9070
Saturated =	301.4516	299.7803	307.6153
Actual BTU =	305.7456	304.0750	311.9070
Real S.G. =	1.470456	1.470407	1.470636
Compressibility =	0.993934	0.993967	0.993812

## Gasoline Content

Pressure Base =	14.73
Propane GPM =	0.5128
Butane GPM =	0.5061
14# Gasoline GPM =	1.0603
26# Gasoline GPM =	1.4865
Total GPM =	2.4793

## Sulfur Content

Mercaptans ppm = N/A  
H2S ppm = N/A

## Dewpoints

H2O #/mmcf = N/A  
Hydrocarbon = N/A  
@ psig = N/A

Comments